

HEART SOUND :- normally there are 4 heart sounds

S₁ Sound :- It corresponds to 'ventricular systole'. It is produced by 'closure of bicuspid & tricuspid valve'.

S₂ Sound :- It corresponds to 'atrial systole' it is produced by 'aortic & pulmonary valve'.

S₃ Sound :- It corresponds to 'atrial diastole' when ventricular systole is just about to start.

S₄ Sound - It corresponds to 'atrial systole' & 'ventricular diastole'.

Area	Locations
Mitral area bicuspid	1) apex beat or 5 th intercostal space just inside mid clavicu line. 2) It is id as area of apex impulse. 3) S ₁ is best heard in this area.
Tricuspid area	1) lower end of sternum.
aortic area	1) 2 nd right intercostal space 2) S ₂ is best heard in this area.
pulmonary area	1) 2 nd left intercostal space 2) also heard by S ₂

CHEST MEASUREMENTS.

	Measurements label	Normal value
1.	4 th costal cartilage (nipple level) also axillary area.	2 to 3 cm.
2.	7 th costal cartilage xiphisternum level (lowest part of sternum)	5 to 7 cm.
3.	9 th costal cartilage	7 to 9 cm.